



CD100

Brazed plate heat exchanger - CombiDryer

General information

Alfa Laval introduced its first brazed plate heat exchanger in 1977 and has since continuously developed and optimized its performance and reliability.

Brazing the stainless steel plates together eliminates the need for gaskets and thick frame plates, which makes the heat exchanger compact and saves material. The brazing material seals and holds the plates together at the contact points ensuring optimal heat transfer efficiency and pressure resistance. Using advanced design technologies and extensive verification guarantees the highest performance and longest possible service lifetime.

The CombiDryer (CD) brazed plate heat exchangers are specifically designed with a unique double circuit configuration for separation of humidity in compressed air. The CombiDryer can be used for air to air as well as air to refrigerant applications.

Typical applications

Compressed air dryer

The standard design supports a wide variety of HFC refrigerants such as R407C, R404A, R507, R134a. The high-pressure version is suitable for R410A and natural refrigerants (CO₂ - propane).

Capacity range

CD100 cover capacities from 35 up to 100 Nm/h or 20 up to 65 scfm. Based on standard components and a modular concept, each unit is custom-designed for each specific installation.

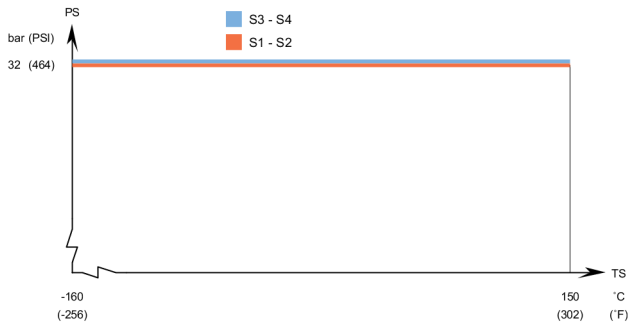
Request for quotation

To receive a quotation for brazed plate heat exchangers that meet your requirements, please provide Alfa Laval representatives with:

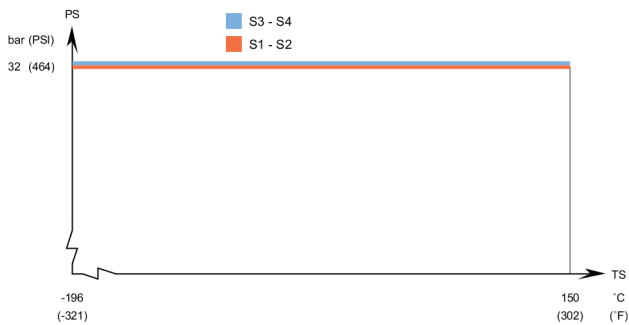
- Required flow rates or heat load
- Temperature program (inlet and outlet)
- Air and refrigerant type
- Desired working pressure
- Maximum permitted pressure drop
- Connection types



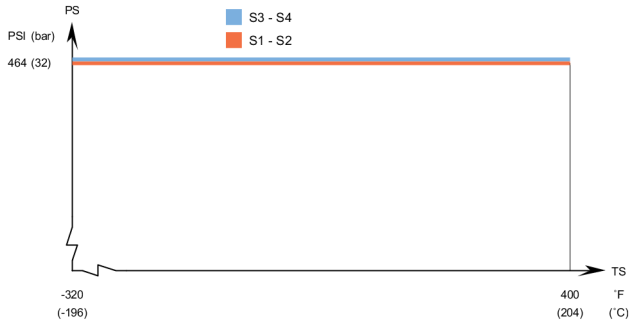
CD100 - PED approval pressure/temperature graph



CD100 - CRN approval pressure/temperature graph



CD100 - UL approval pressure/temperature graph



Standard dimensions and weight

A measure mm = 8.5 + (2.16 * n) (±2 mm or ±2.5 %)
A measure inch = 0.33 + (0.09 * n) (±0.08 inch or ±2.5 %)
Weight** kg = 0.27 + (0.04 * n)
Weight** lb = 0.59 + (0.09 * n)

(n = number of plates)
** Excluding connections

Standard data

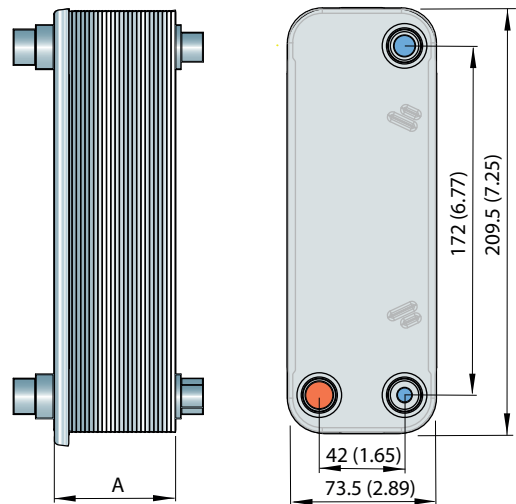
Min. working temperature	see graph
Max. working temperature	see graph
Min. working pressure	vacuum
Max. working pressure	see graph
Volume per channe H, litres (ga)	0.027(0.007)
Volume per channe A, litres (ga)	0.030(0.008)
	0.024(0.006)
Max. flowrate* m³/h (gpm)	4.1 (18)
Min. nbr of plates	4
Max. nbr of plates	60

* Water at 5 m/s (16.4 ft/s) (connection velocity)

Standard materials

Cover plates	Stainless steel
Connections	Stainless steel
Plates	Stainless steel
Brazing filler	Copper

Standard dimensions
mm (inch)



For exact values please contact your local Alfa Laval representative